

Good Mold vs Bad Mold

Mold is everywhere and can have many benefits.

Molds are the "bleu" in bleu cheese and Roquefort. Molds improve our wine. They produce penicillin and antibiotics and are used widely in the food and beverage industry. Without mold and mold's decaying mechanism, the natural environment would be overwhelmed with large amounts of dead organic matter.

Despite many harmless and beneficial molds, some molds can be toxic and pose very serious health threats to humans. The Environmental Protective Agency (EPA) cautions that all molds can cause health problems under the right conditions. The word "toxic" is used to refer to mold that produces toxic compounds, or mycotoxins. Often included in the list of toxic molds is *Stachybotrys Chartarum*, a greenish-black mold, which can grow on high cellulose, low nitrogen materials such as fiberboard, drywall, paper, dust and lint in the presence of moisture.

Adverse Health Effects of Toxic Mold

There are correlations of mold exposure contributing to the following symptoms:

- Allergic reactions, including irritation of the eyes, nose, or throat
- Flu-like symptoms, including fatigue, dizziness, headaches, and diarrhea
- Worsening of asthma.

Some molds can amplify poor Indoor Air Quality and are capable of making people sick.

If You Suspect Mold in Your Home or Building

The first step is to alert your HVAC contractor and/or the building contractor (if the building is relatively new) regarding your concerns. The next step is education and exploring solutions. If mold is found, identifying the type will help establish whether any dangers are present. If health issues are present, evacuation, abatement, and remediation are necessary.

The identification of mold requires specialized testing and laboratory analysis to determine the type of mold and any of the health hazards that may be associated with it. If your HVAC contractor does not perform

mold analysis, abatement, and remediation, they may be able to identify a partnering company that is a trained and certified in this type of work.

Preventing Mold

- Consider air conditioning possible augmented with a dehumidification system. These systems pull the moisture from the building thus minimizing growth by depriving mold of one of its nutrients.
- Use caution when you turning your air conditioning off. In humid climates, extended periods of non-operation of HVAC equipment may allow humidity levels to become quite high in buildings. These periods can permit mold to gain a foothold in the building and thrive.
- Install insulation and vapor barriers to prevent condensation on cold objects such as water pipes, beams, and plumbing fixtures.
- Keep sinks, showers, tubs and other "wet" areas free of standing water.
- Demand architectural, design, and construction applications that prevent water from entering the interior. Areas of concern include improperly pitched roofs, poorly designed balconies, windows, doors, improperly installed flashing, vapor barriers, and thin stucco.
- Maintain the integrity of building envelope through regular inspections, caulking, roof flashing, and sealing of the buildings exterior.

- Perform semi-annual maintenance of HVAC mechanical systems using Preventative Maintenance Agreements with your ACCA Contractor. If water pooling or dust and dirt are allowed to accumulate in a system, the HVAC system could support mold growth.
- Inform your HVAC contractor of your mold concerns and point out locations of suspicion or evidence of mold.
- Educate you family or building occupants about mold, the dangers, and prevention.

How can I minimize mold growth?

Mold is a natural byproduct of the fungi family that thrive when nutrients—primarily organic substances and water—are found in the right conditions. These organic substances include materials commonly found in buildings: soil, dead plants, carpets, drywall, fiberboard, wood, paper, dust, lint, and etc. Mold propagates via spores that can remain dormant—yet viable—for years during periods when moisture is not present. Mold issues require education, identification, remediation, and solutions to minimize mold growth in the environments we live.

Heating Ventilation and Air Conditioning (HVAC) mechanical systems are not generators of mold. Their metallic surfaces do not provide the organic matter mold needs to grow. However, systems that are not well maintained could support mold growth.

ACCA is the nationwide nonprofit association of heating, ventilation, air condition, and refrigeration contracting businesses. For over 40 years, ACCA has provided education and research in support of efficient, safe and healthy heating and cooling systems. Learn more at www.acca.org.



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